

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON



A NEW ANABANTID FISH OF THE GENUS *BETTA*
FROM JOHORE.

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Mr. C. M. Breder, Jr., Assistant Director of the New York Aquarium, has recently been investigating the breeding behavior of two species of *Betta* which practice oral brooding instead of building a floating nest of foam, as is the practice of *B. splendens* and *B. bellica*. Mr. Breder has sent me specimens of his two species for determination. The smaller one agrees with *B. picta* (Cuvier and Valenciennes) but the larger seems to be an unknown form, not only one of the largest but also one of the most well-marked species of *Betta* yet discovered.

***Betta brederi*, new species.**

Betta pugnax (nec Cantor) Brind, 1934, p. 95 (stream in Johore to the westward of the Johore River).

Betta sp. Breder, 1934, p. 126, fig. (Johore; breeding habits in aquaria).

Holotype.—U. S. N. M. 94400, an adult female 66 mm. standard length (91 mm. total), from swift-flowing water in a small stream in Johore which empties into Johore Strait near the middle of the latter and west of the Johore River (probably the Sungai Tebrau), taken together with a species of *Channa* (*Ophicephalus*) and *Rasbora heteromorpha* in the spring of 1933 by Arnold Ramsperger, and brought alive to New York; received from C. M. Breder, Jr.

Paratype.—U. S. N. M. 94442, an adult male 69 mm. standard length (98 mm. total), same data as holotype.

A large, very robust species, differing from all described forms in the presence of two short, stout, sharp spines in the dorsal fin.

Dorsal II, 8-9. Anal II, 23-24. Caudal 13. Pectoral 12. Pelvic I, 5. Scales lateral 29 (plus 3 on base of caudal); predorsal (to snout-tip) 23-25; transverse (between mid-dorsal scale series and anal fin origin) 11. Dorsal originating slightly nearer vertical of end of opercle than vertical of end of hypural fan, over sixth soft ray of anal and opposite fourteenth scale of mid-side series; fifth soft dorsal ray longest, attenuate. First soft pelvic

ray filamentous. Caudal strongly acuminate. Head approximately equal to depth, about 3.1 times in standard length. Eye 3.9 in head; 1.5 in interorbital; shorter than snout. Maxillary reaching vertical of posterior nostril, not quite to front border of eye. Depth of caudal peduncle equal to head behind anterior border of pupil.

Measurements of holotype in millimeters (figures for paratype in parentheses).—Standard length 66.0 (69.0). Total length 91.0 (98.0). Head 21.0 (22.0). Eye 5.3 (5.7). Interorbital (bony) 8.0 (9.6). Snout 6.0 (7.6). Depth 21.2 (22.0). Depth caudal peduncle 14.0 (15.5). Predorsal length 42.0 (45.0). Base anal fin 34.0 (35.0). Base dorsal fin 10.3 (10.0). Greatest thickness of body 14.0 (17.0). Length pectoral 13.0 (15.0). Length longest dorsal ray (fifth) 15.0 (21.0). Length longest anal ray (twenty-first) 21.0 (24.0). These measurements are made in the usual way, with calipers, from point to point as indicated, not as to the vertical of the points along the axis of the fish.

Color in spirits dark, dull brownish, with three faintly darker longitudinal lines along the sides on the fourth, sixth and eighth scale rows below the dorsal. Unpaired fins blackish. Pelvics dark, the filament tipped with white. Pectorals hyaline.

For comparison with the new fish the National Museum has material only of *Betta splendens* Regan, *B. anabatooides* Bleeker, *B. patoti* Weber and de Beaufort, *B. picta* (Cuvier and Valenciennes), *B. taeniata* Regan, and *B. bellica* Savage. None of these approach *B. brederi* closely.

The locality data for the new fish has been derived from Brind's paper. Brind obtained his information directly from the collector. The two type specimens were among those mentioned by Brind as having been purchased for the New York Aquarium by Mr. C. W. Coates of that institution at the time the fish arrived in New York.

LITERATURE.

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